FIIG A247

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FEDERAL ITEM IDENTIFICATION GUIDE

CHEMICAL COMPOUNDS, PHOTOGRAPHIC AND COPY PROCESSING

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Commander

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BY ORDER OF THE DIRECTOR

/s/

Commander

Defense Logistics Information Service

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GENERAL INFORMATION

1. Purpose and Scope

This Federal Item Identification Guide (FIIG) is a self-contained document for the collection, coding, transmittal, and retrieval of item characteristics and related supply management data for an item of supply for logistical use. This FIIG is to be used to describe items of supply identified by the index of approved item names appearing in this section.

2. Contents

This FIIG is comprised of the following:

Index of Approved Item Names Covered by this FIIG

Applicability Key Index

Section I - Item Characteristics Data Requirements

Section III - New text that should be here.

Appendix A - Reply Tables

Appendix B - Reference Drawing Groups (as applicable)

Appendix C - Technical Data Tables (as applicable)

a. Index of Approved Item Names Covered by this FIIG:

The index lists the approved item names with definitions and item name codes as they appear in Cataloging Handbook H6, applicable to this FIIG. In addition, each name entry is assigned an applicability key for use in relating the characteristics requirements in Section I to the specific item name.

b. Applicability Key Index:

The purpose of this index is to provide the user with a ready reference for determining the specific requirements which are applicable to a given approved item name. This index lists all requirements in sequence as they appear in the FIIG. The applicability of a Master Requirement Coded requirement is indicated by the column headed by the specific item name applicability key as follows:

- (1) The letter "X" indicates the requirement must be answered for a full descriptive item.
- (2) The letters "AR" indicate the requirement is to be answered as required by (1) instructional notes within the FIIG; (2) when the reply is predicated on replies to a related main requirement; or (3) when an asterisk (*) is used in conjunction with the applicability key column in Section I.
- (3) A blank in the column indicates the requirement is not applicable to the specific item name.

c. Section I - Item Characteristics Data Requirements:

This section contains the physical and performance characteristics requirements needed to describe and identify an item of supply. These characteristics differentiate one item from all other items of supply and are to be used to meet the needs of all supported functions. This section is arranged in columns. Identification of each column and instructions pertinent thereto are as follows:

(1) Applicability Key:

The first column shows the applicability key(s) for each requirement. It indicates whether the requirement need be satisfied for the item being identified. "ALL" indicates that the requirement must be answered for all items covered by the FIIG. One or more alphabetic character(s) or group of one or more alphabetic characters indicates a response is required when describing items with an approved item name or names represented by the key(s). An asterisk (*) used in conjunction with any applicability key indicates that the characteristic stated in the requirement may not be applicable to all items covered by the FIIG.

(2) Master Requirement Codes (MRC):

A four-position code which is assigned to a FIIG requirement for identification of the requirement, cross-referencing requirements in the various sections and appendices of the FIIG, and for mechanized processing and retrieval of FIIG generated data. Absence of a MRC for a requirement indicates a lead-in to requirements with individual MRCs in Appendix B.

(a) The coding technique for providing MULTIPLE/OPTIONAL responses will not be used for a Section I requirement assigned Mode Code A or L that leads to Appendix B sketches with dimensional requirements.

(b) Identified Secondary Address Coding:

This technique is for extending the Master Requirement Code so that a unique address is provided for each application of the requirement in relation to the item and is authorized only as instructed within the requirement. Responses coded through this technique will always consist of the following: (1) Master Requirement Codes, (2) indicator code (a single numeric character determined by the number of positions contained), (3) identified secondary address code (1 to 3-digit alphabetic codes determined by the number of predicted replies), (4) the mode code, (5) the reply code and/or clear text response, and (6) end with a record separator (*). Steps (1) through (6) are repeated for each application of the requirement.

(c) AND/OR coding:

A technique for extending the Master Requirement Code to provide a distinctive address for multiple responses to the same requirement. Responses coded through this technique will always consist of (1) Master Requirement Code, (2) mode code, (3) the response or reply code (as instructed by the requirement), (4) a single dollar sign (\$) for an OR condition, or a double dollar sign (\$\$) for an AND condition, (5) the mode code, (6) the response or reply code

(followed by conditions (4) through (6) for each of the multiple responses) and (7) end with a record separator (*). NOTE: Apply this technique only when instructed by the requirement sample reply (e.g.).

(3) Mode Code:

A one-position alphabetic code that specifies the manner in which a response will be prepared. Each requirement assigned a MRC is also assigned a mode code. Sample replies follow each FIIG requirement displaying the proper construction of a response for the assigned mode code. The response to a requirement will always be prepared in accordance with the assigned mode code and sample reply except in the following instances:

- (a) Use of E Mode Code replies is not authorized. If a reply needed to describe an item is not listed in the applicable table, contact the FIIG Initiator.
- (b) Mode Code K may not be used for any requirement unless instructed by the requirement instructions.

(4) Requirement:

This portion includes the characteristics data elements and data use identifiers required to identify and differentiate one item of supply from another, narrative definitions, and explanations as to use and method of expression. Instructions for coding and preparing replies are also provided.

(5) Reply Code:

A code that represents an established authorized reply to a requirement.

d. Section III - Supplementary Technical and Supply Management Data:

This section includes those characteristics requirements necessary to support specific logistics functions other than National Stock Number assignment.

e. Appendix A - Reply Tables:

Tables of authorized replies to requirements and reply codes when the tables are too lengthy for inclusion in Section I/III, when applicable.

f. Appendix B - Reference Drawings:

This appendix contains representative illustrations which portray specific variations of one or more generic characteristics. If reference drawings contain requirements pages to be used in conjunction with illustrations for dimensioning purposes, the requirements pages will contain Master Requirement Codes, mode codes, and a statement of the requirement. A response to requirements on a requirements page is necessary only for those Master Requirement Codes applicable to the illustration selected.

g. Appendix C - Technical Data Tables:

This appendix contains conversion charts and similar data pertinent to the requirements in Section I/III, when applicable.

3. Enter administrative MRC CLQL immediately following the last FIIG requirement reply, as instructed below:

<u>MRC</u>	Mode Code	Requirement	<u>Example</u>
CLQL	G	COLLOQUIAL NAME (common usage name by which an item is known)	CLQLGWOVEN WIRE CLOTH*

- 4. Special Instructions and Indicator Definitions
 - a. Measurements:

Unless otherwise indicated within a requirement example, enter all measurements in decimal form, carried to the nearest three decimal places, with a minimum of one digit preceding the decimal. For SI (metric), enter all measurements with a minimum of one digit before and after the decimal. For fraction to decimal conversion, see Appendix C.

b. Indicators:

A cross hatch (#) following an AIN, MRC, Reply Code or Drawing Number indicates for "ALL EXCEPT USA" use only.

5. Indexes

a. Index of Data Requirements

This index is arranged in alphabetic sequence by Master Requirement Code, cross-referenced to the applicable data requirement and page number(s).

b. Index of Approved Item Names

This index is arranged in alphabetic sequence referenced to Applicability Key.

c. Applicability Key Index

This index is arranged in Applicability Key Sequence.

6. Maintenance

Requests for revisions and other changes will be directed to:

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Index of Master Requirement Codes

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ZZZY	
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ENAC.	
PTRM	
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ELCD	
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AKHS	
BBRJ	
BGTB	
AFJQ	
MARK	
CBME	
SUPP	
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ZZZV	
CXCY	
DERM	
H7RD	20 28

FIIG A247 GENERAL INFORMATION SECTION I/III REQUIREMENTS INDEX

INDEX OF APPROVED ITEM NAMES COVERED BY THIS FIIG

Approved Item Name **INC** App Key BLEACH, PHOTOGRAPHIC 02748 A A chemical substance which, when in solution, converts the silver image to a silver salt. CLEARING BATH, PHOTOGRAPHIC 02749 В A chemical substance which, when in solution, removes dye or stain from negatives or prints without altering the image or base. DEVELOPER, INDIRECT 30856 \mathbf{C} ELECTROSTATIC PROCESS A electrically charged substance, used in copy processing, which acts as a carrier for the toner in recording the image on a selenium drum. Excludes DEVELOPING SOLUTION, DIRECT ELECTROSTATIC PROCESS and DEVELOPER, PHOTOGRAPHIC. DEVELOPER, PHOTOGRAPHIC 17624 D A chemical substance which forms a developing solution that produces a visible image on exposed photographic sensitized surfaces. It does not include DEVELOPER, X-RAY FILM PROCESSING. DEVELOPER, X-RAY FILM PROCESSING E 14872 A chemical substance which forms a developing solution that produces a visible image in a sensitive emulsion which has been exposed to x-rays. C DEVELOPING SOLUTION, DIFFUSION 29087 TRANSFER PROCESS A chemical agent which develops the negative and positive sheets of the paper to form a visible image. C DEVELOPING SOLUTION, DIRECT 29088 **ELECTROSTATIC PROCESS** A chemical agent which fuses the toner powder onto the paper, thus making the image permanent. DEVELOPING SOLUTION, DYE \mathbf{C} 29089 TRANSFER PROCESS

A chemical agent which activates the matrix, allowing the dye to be transferred to the copy paper.

Approved Item Name App Key INC \mathbf{C} DEVELOPING SOLUTION, 29090 STABILIZATION PROCESS A chemical agent which activates or develops the paper prior to stabilization. \mathbf{C} **DISPERSANT** 50059 A chemical agent which activates TONER (as modified) prior to making the copier image permanent. DRYING AGENT, PHOTOGRAPHIC 02750 В A chemical substance used to accelerate the drying of photographic film, plates, or prints. Sometimes a hardener is added to the drying agent to combine the drying and hardening. F DYE, PHOTOGRAPHIC 18671 A chemical substance used to color or tone photographic materials. ERADICATOR, PHOTOGRAPHIC PRINT \mathbf{C} 02688 An item used to remove lines, spots, and tone areas from black and white photographs. FIXER, X-RAY FILM PROCESSING 14874 K A chemical substance which forms a fixing solution to prevent injury to the image by the undeveloped sensitive salts left over from the developing process. FIXING BATH, PHOTOGRAPHIC 02751 G A chemical substance which forms a fixing bath solution to prevent injury to the silver image by the undeveloped sensitive salts left over from the developing process. It does not include FIXER, X-RAY FILM PROCESSING. 50799 C **FUSER FLUID** A product consisting of ether oils and/or chemical solvents used in conjunction with copiers and laser printers. GLOSS SOLUTION, PHOTOGRAPHIC 21112 \mathbf{C} **PRINT** A photographic chemical solution used for the purpose of bathing glossy prints prior to drying in order to enhance the gloss and to reduce static electricity and print curling. HARDENER, PHOTOGRAPHIC 02752 Η A chemical substance which is generally used in processing film, plates, or prints where the temperature is above 70 degrees Fahrenheit. Its purpose is to harden the gelatin of the emulsion to prevent swelling or softening.

Approved Item Name	<u>INC</u>	App Key
HYPO ELIMINATOR, PHOTOGRAPHIC	02753	В
A chemical substance which forms a hypo eliminator sol hypo remaining on the emulsion.	ution. It is used to remove the	e fixing bath agent or
INTENSIFIER, PHOTOGRAPHIC	02757	N
A chemical substance used to increase the density and co	ontrast of a processed photogr	raphic image.
POLISH, FERROTYPE, PHOTOGRAPHIC	02759	C
A chemical substance used to clean and polish the surfactures used to press (squeegee) photographic prints for d		plated metal sheets or
REDUCER, PHOTOGRAPHIC CHEMICAL	02761	N
A chemical substance used in photographic processing to	reduce the density of the sil-	ver image.
REPLENISHER, DEVELOPER, PHOTOGRAPHIC	02762	M
A chemical used to reactivate a processing solution to its include REPLENISHER, X-RAY FILM PROCESSING.		d volume. It does not
REPLENISHER, X-RAY FILM PROCESSING	14873	E
A chemical substance designed to keep the activity of x-effective life.	ray film processing solutions	constant during
RETOUCHING FLUID, PHOTOGRAPHIC	20524	C
A fluid used on photographic negatives to provide a base pencil.	for alterations which are ma	de with either a pen or a
STABILIZER, PHOTOGRAPHIC	28906	J
A chemical substance which forms a stabilizing bath. In for the fixer to provide a quick processing technique for it is used as a final chemical bath to increase permanence	temporary use of film and pap	
STOP BATH, PHOTOGRAPHIC	02763	J

A chemical solution in which film and/or paper is placed following development and preceding fixing, to neutralize the developer and stop development immediately.

Approved Item Name **INC** App Key \mathbf{C} STRIPPING SOLUTION, WET PLATE 20525 **NEGATIVE** A colorless, cellulosic type solution used to both protect and strip, in one operation, the exposed emulsion from photographic plates in the wet-plate process. TONER, DIRECT ELECTROSTATIC 29092 C **PROCESS** A positive charged powder, or a liquid, which develops the paper prior to the fusing action. C TONER, INDIRECT ELECTROSTATIC 30490 **PROCESS** An electrically charged chemical agent, used in copy processing, which transfers the image from the charged areas of a selenium drum to the recorder paper. TONER, PHOTOGRAPHIC 18672 L A chemical solution used to treat finished photographic prints. The solution is designed to alter or vary the tone of the silver image for shade effects. C WASH ADDITIVE, PHOTOGRAPHIC 02765

A concentrate of nonspecific chemical composition formulated to be added to the wash solution to speed up the washing of exposed photographic film or paper, by reducing the sodium hyposulphite affinity for emulsions or paper fiber.

FIIG A247 GENERAL INFORMATION APPLICABILITY KEY INDEX

APPLICABILITY KEY INDEX

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>
NAME	X	X	X	X	X	X	X	X	X	X
AGXW	X	X	X	X	X	X	X	X	X	X
BRRF	X	X	X	X	X	X	X	X	X	X
BGKF	AR									
AKKF	AR									
СВЈН	X	X		X		X	X	X	X	
AKGT	X	X		X			X	X	X	
BGKG				AR					AR	
BGKH				X	X		X	X		X
BGKJ					X					
BGKN	X			X						
BGKK				X						
BGKL	AR			AR			AR		AR	
BGKM			AR			X				
FEAT	AR									
TEST	AR									
SPCL	AR									
ZZZK	AR									
ZZZT	AR									
ZZZW	AR									
ZZZX	AR									
ZZZY	AR									
CRTL	AR									
ENAC	AR									
PTRM	AR									
ELRN	AR									
ELCD	AR									
AFJF	AR									
AKHS	AR									
BBRJ	AR									
BGTB	AR									
AFJQ	AR									
MARK	AR									
CBME	AR									
SUPP	AR									
ZZZP	AR									
ZZZV	AR									
CXCY	AR									
DERM	AR									
HZRD	AR									

FIIG A247 GENERAL INFORMATION APPLICABILITY KEY INDEX

	<u>L</u>	<u>M</u>	<u>N</u>
NAME AGXW BRRF BGKF AKKF CBJH AKGT BGKG BGKH BGKN BGKK	X X X AR AR	X X X AR AR X X AR X X	X X X AR AR X
BGKM	X	71	
FEAT	AR	AR	AR
TEST	AR	AR	AR
SPCL	AR	AR	AR
ZZZK	AR	AR	AR
ZZZT	AR	AR	AR
ZZZW	AR	AR	AR
ZZZX	AR	AR	AR
ZZZY	AR	AR	AR
CRTL	AR	AR	AR
ENAC	AR	AR	AR
PTRM	AR	AR	AR
ELRN	AR	AR	AR
ELCD	AR	AR	AR
AFJF	AR	AR	AR
AKHS	AR	AR	AR
BBRJ	AR	AR	AR
BGTB	AR	AR	AR
AFJQ	AR	AR	AR
MARK	AR	AR	AR
CBME	AR	AR	AR
SUPP	AR	AR	AR
ZZZP	AR	AR	AR
ZZZV	AR	AR	AR
CXCY	AR	AR	AR
DERM	AR	AR	AR
HZRD	AR	AR	AR

SECTION I

APP Mode

Key MRC Code Requirements

ALL

NAME D ITEM NAME

Definition: A NOUN, WITH OR WITHOUT MODIFIERS, BY WHICH AN ITEM OF SUPPLY IS KNOWN.

Reply Instructions: Enter the applicable Item Name Code from the index appearing in the General Information Section. (e.g., NAMED17624*)

ALL

AGXW D PHYSICAL FORM

Definition: THE RECOGNIZED SHAPE, CONFIGURATION, STRUCTURE, OR MOLD OF A SUBSTANCE, NATURAL OR REFINED, THAT MOST NEARLY CORRESPONDS TO THE APPEARANCE OF THE ITEM.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AGXWDAAAL*; AGXWDAABW\$\$DAAAM*; AGXWDAABW\$DAAAM*)

REPLY CODE	<u>REPLY (AE98)</u>
AACQ	CRYSTAL (crystalline)
AAEJ	GEL
AACW	GLOBULAR (bead)
AABW	GRANULAR
AAAL	LIQUID
AAAN	PASTE
AAAM	POWDER
AAGF	SLURRY

ALL

BRRF D UNIT PACKAGE CONTENT FORM

Definition: AN INDICATION OF THE PREPARED STATE OF THE PACKAGED ITEM(S).

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BRRFDBYK*; BRRFDBYK\$DBYL*)

APP Key	MRC	Mode Code	Requirements
		<u>REPLY</u> CODE	REPLY (AK54)
		BYM	PREMIXED UNIT (ready-to-use, requiring no diluting, dissolving, or mixing)
		BYL	SEPARATE UNITS FOR MIXING (two or more ingredients, separately packaged, requiring mixing before
		ВҮК	use) SINGLE UNIT FOR MIXING (requires mixing with a diluent or solvent before use)

NOTES FOR MRCS BGKF AND AKKF: REPLY TO MRC BGKF WHEN REPLY CODE BYK OR BYL IS ENTERED FOR MRC BRRF. REPLY TO MRC AKKF IF VARIABLE YIELD QUANTITIES ARE INVOLVED, OR WHEN REPLY CODE BYM IS ENTERED FOR MRC BRRF.

ALL* (See Note Above)

BGKF J UNIT PACKAGE YIELD

Definition: THE YIELD PER PACKAGE UNIT WHEN MIXED AS RECOMMENDED.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., BGKFJAF5.000*; BGKFJAM10.0*; BGKFJAF1.000\$JCC3.785*)

For measurements over 1 gallon, see Appendix C, Table 2.

REPLY CODE	REPLY (AG67)
AF	GALLONS
CC	LITERS
AM	MILLILITERS
AN	OUNCES

ALL* (See Note Preceding MRC BGKF)

AKKF J QUANTITY WITHIN EACH UNIT PACKAGE

Definition: THE NUMBER OF THE VOLUME, FORM, OR THE DOSAGE WITHIN EACH UNIT PACKAGE.

APP Mode

Key MRC Code Requirements

Reply Instructions: Enter the applicable Reply Code from the below, followed by the numeric value. (e.g., AKKFJAF5.000*; AKKFJBA50.0*; AKKFJAN6.000\$\$JAF2.000*)

For dry weight quantities over 1 pound, see Appendix C, Table 1. For liquid measurements over 1 gallon, see Appendix C, Table 2.

REPLY CODE	REPLY (AG67)
AE	FLUID OUNCES
AF	GALLONS
BA	GRAMS
AJ	KILOGRAMS
CC	LITERS
AM	MILLILITERS
AN	OUNCES
AS	POUNDS

A, B, D, F, G, H, J, M, N

CBJH D MATERIAL TYPE FOR WHICH DESIGNED

Definition: INDICATES THE TYPE OF MATERIAL FOR WHICH THE ITEM IS DESIGNED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., CBJHDAAXQ*; CBJHDAAXQ\$\$DAAXS*)

REPLY CODE
AAXQ
FILM
AAXR
PAPER
AAXS
PLATE

A, B, D, G, H, J, M

AKGT D REPRODUCTION TYPE

Definition: INDICATES THE TYPE OF IMAGE DESIGNED TO APPEAR ON THE MATERIAL AFTER EXPOSURE AND DEVELOPMENT.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AKGTDAS*; AKGTDAR\$\$DAS*)

REPLY CODE REPLY (AG39)

APP Key	MRC	Mode Code	Requirements
		AR	BLACK AND WHITE
		AS	COLOR

NOTE FOR MRC BGKG: FOR APPLICABILITY KEY D, J, OR M, REPLY TO MRC BGKG IF REPLY CODE AS IS ENTERED FOR MRC AKGT AND THE COLOR REVERSAL PROCESS IS APPLICABLE. DO NOT REPLY TO MRC BGKG FOR APPLICABILITY KEY A, B, G, OR H.

D*, J*, M* (See Note Above)

BGKG D SEQUENTIAL USAGE

Definition: AN INDICATION OF WHICH STEP IN A PROCESS THE ITEM IS USED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BGKGDAD*; BGKGDAD\$\$DAE*)

<u>REPLY</u>	REPLY (AG66)
<u>CODE</u>	
AD	FIRST STAGE (first developer, first stop bath, etc.)
AE	SECOND STAGE (color developer, second stop bath,
	etc)

D, E, G, H, K, M

BGKH D MATERIAL PROCESSING METHOD

Definition: THE MEANS OF PROCESSING FOR WHICH THE MATERIAL IS DESIGNED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BGKHDAABD*; BGKHDAABD\$\$DAAAF*)

REPLY CODE	REPLY (AC58)
AABD	AUTOMATIC (roller transport processors)
AAAF	MANUAL (tank, tray)

E

BGKJ D PROCESSING SPEED

APP Mode

Key MRC Code Requirements

Definition: AN INDICATION OF THE SPEED AT WHICH AN ITEM MAY BE PROCESSED.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BGKJDE*)

REPLY CODE
N NOT RATED
E RAPID
H REGULAR

A, D, M

BGKN D IMAGE CONTRAST

Definition: AN INDICATION OF THE IMAGE TONE DENSITY PRODUCED BY THE ITEM.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BGKNDAG*; BGKNDAG\$DAH*)

REPLY CODE REPLY (AG49)

AG HIGH AH LOW

AJ MEDIUM (moderate)

N NOT RATED

D, M

BGKK D GRAIN CONTROL

Definition: AN INDICATION OF THE DEGREE TO WHICH THE ITEM CAN CONTROL THE GRAIN SIZE.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BGKKDAK*)

REPLY CODE
AK
FINE
AJ
MEDIUM
N
NOT RATED

APP Mode

Key MRC Code Requirements

A*, D*, G*, J*

BGKL D ADDITIVE FUNCTION

Definition: AN INDICATION OF THE FUNCTION PERFORMED BY THE ADDITIVE.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BGKLDBH*; BGKLDBH\$DBJ*; BGKLDBH\$DBJ*)

REPLY CODE
BH HARDENER
BJ REPLENISHER

C*, F, L

BGKM D COLOR TONE PRODUCED

Definition: THE HUE, TINT, OR SHADING PRODUCED BY THE ITEM.

Reply Instructions: Enter the applicable Reply Code from <u>Appendix A</u>, Table 3. (e.g., BGKMDRE0000*)

ALL*

FEAT G SPECIAL FEATURES

Definition: THOSE UNUSUAL OR UNIQUE CHARACTERISTICS OR QUALITIES OF AN ITEM NOT COVERED IN THE OTHER REQUIREMENTS AND WHICH ARE DETERMINED TO BE ESSENTIAL FOR IDENTIFICATION.

Reply Instructions: Enter the reply in clear text. Separate multiple replies with a semicolon. (e.g., FEATGADJUSTABLE NOSE CLIP*; FEATGADJUSTABLE NOSE PIECE; DISPOSABLE*)

ALL*

TEST J TEST DATA DOCUMENT

APP Mode

Key MRC Code Requirements

Definition: THE SPECIFICATION, STANDARD, DRAWING, OR SIMILAR INSTRUMENT THAT SPECIFIES ENVIRONMENTAL AND PERFORMANCE REQUIREMENTS OR TEST CONDITIONS UNDER WHICH AN ITEM IS TESTED AND ESTABLISHES ACCEPTABLE LIMITS WITHIN WHICH THE ITEM MUST CONFORM IDENTIFIED BY AN ALPHABETIC AND/OR NUMERIC REFERENCE NUMBER. INCLUDES THE COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE OF THE ENTITY CONTROLLING THE INSTRUMENT.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the 5-position CAGE Code, a dash, and the document identification number.

(e.g., TESTJA12345-CWX654321*;

TESTJA1234A-654321\$\$JB5556A-663654*;

TESTJAA2345-654321\$JB55566-663654*)

REPLY CODE	REPLY (AC28)
A	SPECIFICATION (Includes engineering type bulletins,
	brochures, etc., that reflect specification type data in
	specification format; excludes commercial catalogs,
	industry directories, and similar trade publications,
	reflecting general type data on certain environmental and
	performance requirements and test conditions that are
	shown as "typical," "average," "nominal," etc.)
В	STANDARD (Includes industry or association standards,
	individual manufacturer standards, etc.)
C	DRAWING (This is the basic governing drawing, such as a contractor drawing, original equipment manufacturer
	drawing, etc.; excludes any specification, standard, or other
	• • •
	document that may be referenced in a basic governing
	drawing)

ALL*

SPCL G SPECIAL TEST FEATURES

Definition: TEST CONDITIONS AND RATINGS, OR ENVIRONMENTAL AND PERFORMANCE REQUIREMENTS THAT ARE DIFFERENT, MORE CRITICAL, OR MORE SPECIFIC THAN THOSE SPECIFIED IN A GOVERNING TEST DATA DOCUMENT.

APP Mode
Key MRC Code Requirements

Reply Instructions: Enter the reply in clear text. (e.g., SPCLGSELECTED AND TESTED FOR NAVIGATIONAL SYSTEMS*)

ALL*

ZZZK J SPECIFICATION/STANDARD DATA

Definition: THE DOCUMENT DESIGNATOR OF THE SPECIFICATION OR STANDARD WHICH ESTABLISHED THE ITEM OF SUPPLY.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the Commercial and Government Entity (CAGE) Code of the entity controlling the document, a dash, and the document designator. The agency that controls the limited coordination document must be preceded and followed by a slash following the designator. The word canceled or superseded must be preceded and followed by a slash for the designator. Professional and industrial association specifications/standards are differentiated from a manufacturer's specification in that the data has been coordinated and published by the professional and industrial association. Include amendments and revisions where applicable.

(e.g., ZZZKJT81337-30642B*;

ZZZKJS81349-MIL-D-180 REV1/CANCELED/*;

ZZZKJP80205-NAS1103*;

ZZZKJS81349-MIL-C-1140C/CE/*;

ZZZKJT81337-30642B\$\$JP80205-NAS1103*)

<u>REPLY</u>	REPLY (AN62)
CODE	
S	GOVERNMENT SPECIFICATION
T	GOVERNMENT STANDARD
D	MANUFACTURERS SOURCE CONTROL
R	MANUFACTURERS SPECIFICATION
N	MANUFACTURERS SPECIFICATION CONTROL
M	MANUFACTURERS STANDARD
В	NATIONAL STD/SPEC
A	PROFESSIONAL/INDUSTRIAL ASSOCIATION
	SPECIFICATION
P	PROFESSIONAL/INDUSTRIAL ASSOCIATION
	STANDARD

APP Mode

Key MRC Code Requirements

NOTE FOR MRC ZZZT: IF THE SPECIFICIATION/STANDARD CITED IN REPLY TO MRC ZZZK IS NONDEFINITIVE, REPLY TO MRC ZZZT. THIS REPLY IS THE DATA WHICH IS NOT RECORDED IN SEGMENT C.

ALL* (See Note Above)

ZZZT J NONDEFINITIVE SPEC/STD DATA

Definition: THE NUMBER, LETTER, OR SYMBOL THAT INDICATES THE TYPE, STYLE, GRADE, CLASS, AND THE LIKE, OF AN ITEM IN A NONIDENTIFYING SPECIFICATION OR STANDARD.

Reply Instructions: Enter the applicable Reply Code from <u>Appendix A</u>, Table 1, followed by the appropriate number, letter, or symbol. (e.g., ZZZTJTY1*; ZZZTJTY1\$\$JSTA*; ZZZTJTY1\$JSTA*)

ALL*

ZZZW G DEPARTURE FROM CITED DOCUMENT

Definition: THE TECHNICAL DIFFERENTIATING CHARACTERISTIC(S) OF AN ITEM OF SUPPLY WHICH DEPART(S) FROM THE TEXT OF A SPECIFICATION OR A STANDARD IN THAT IT REPRESENTS A SELECTION OF CHARACTERISTICS STATED IN THE SPECIFICATION OR STANDARD AS BEING OPTIONAL, OR A VARIATION FROM ONE OR MORE OF THE STATED CHARACTERISTICS, OR AN ADDITIONAL CHARACTERISTIC NOT STATED IN THE SPECIFICATION OR STANDARD.

Reply Instructions: Enter the reply in clear text. (e.g., ZZZWGAS MODIFIED BY MATERIAL*)

ALL*

ZZZX G DEPARTURE FROM CITED DESIGNATOR

Definition: THE VARIATION WHEN THE ITEM IS IN CONFORMITY WITH A TYPE DESIGNATOR COVERED BY A SPECIFICATION OR STANDARD, EXCEPT IN REGARD TO ONE OR MORE TECHNICAL DIFFERENTIATING CHARACTERISTICS.

Reply Instructions: Enter the reply in clear text. (e.g., ZZZXGAS MODIFIED BY MATERIAL*)

ALL*

APP Key	MRC	Mode Code	Requirements
	ZZZY	G	REFERENCE NUMBER DIFFERENTIATING CHARACTERISTICS

Definition: A FEATURE OF THE ITEM OF SUPPLY WHICH MUST BE SPECIFICALLY RECORDED WHEN THE REFERENCE NUMBER COVERS A RANGE OF ITEMS.

Reply Instructions: Enter the reply in clear text. (e.g., ZZZYGCOLOR CODED LEADS*; ZZZYGAS DIFFERENTIATED BY MATERIAL*)

ALL*

CRTL CRITICALITY CODE JUSTIFICATION Α

Definition: THE MASTER REQUIREMENT CODES OF THOSE REQUIREMENTS WHICH ARE TECHNICALLY CRITICAL BY REASON OF TOLERANCE, FIT, PERFORMANCE, OR OTHER CHARACTERISTICS WHICH AFFECT IDENTIFICATION OF THE ITEM.

Reply Instructions: Enter the Master Requirement Code for the requirement, the reply to which renders the item as being critical. (e.g., CRTLAMATL*; CRTLAMATL\$\$ASURF*)

Reply to this requirement only if the header record for the item identification for the item being identified has been coded as critical.

NOTE FOR MRC ENAC: ANSWERING THIS MRC WILL GENERATE AN ENAC CODE IN THE ITEM IDENTIFICATION SEGMENT (A) OF THE NSN.

ALL* (See Note Above)

ENAC D ENVIRONMENTAL ATTRIBUTE CODE

Definition: INDICATES THE TYPE OF PRODUCT THAT MEETS OR EXCEEDS THE GOVERNMENT GUIDELINES FOR ENVIRONMENTALLY PREFERRED CHARACTERISTICS.

Reply Instructions: ENACDE4*; ENACDE4\$\$DGQ*)

REPLY CODE	REPLY (EN02)
E4	COMPREHENSIVE PROCUREMENT GUIDELINE - NON-PAPER OFFICE PRODUCTS - TONER
GQ	CARTRIDGES LOW VOLATILE ORGANIC COMPOUND -
-	CONSUMER PRODUCTS - HOUSEHOLD

APP Mode

Key MRC Code Requirements

CONSUMER PRODUCTS

NOTE FOR MRC PTRM: IF REPLY CODE E4 WAS ENTERED FOR MRC ENAC, REPLY TO MRC PTRM.

ALL* (See Note Above)

PTRM B TOTAL RECOVERED MATERIALS PERCENTAGE

Definition: THE PERCENTAGE OF THE TOTAL RECOVERED OR RECYCLED MATERIAL, FROM MANUFACTURING PROCESSES OR CONSUMER, INCLUDED IN THE ITEM.

Reply Instructions: Enter the numeric value. (e.g., PTRMB50.0*)

ALL*

ELRN G EXTRA LONG REFERENCE NUMBER

Definition: A REFERENCE NUMBER EXCEEDING 32 POSITIONS.

Reply Instructions: Enter the entire reference number. Do not include the 5-position Commercial and Government Entity (CAGE) Code unless there is more than one extra long reference number on the NSN, (e.g.,

ELRNGANN112036BIL060557LEN313605UZ62365*).

If there is more than one extra long reference number on the NSN, include the CAGE or NCAGE and separate each reference by using the "&" character, (e.g., 28480 ANN112036BIL060557LEN313605UZ62365 & S1234 NN112036BIL060557LEN313605UZ62365).

In determining quantity of characters in the reference number, count will be made after modification in accordance with Volume 2, Chapter 9, FLIS Procedures Manual, DoD 4100.39-M.

ALL*

ELCD D EXTRA LONG CHARACTERISTIC DESCRIPTION

Definition: A DESCRIPTION THAT EXCEEDS 5000 CHARACTERS.

Reply Instructions: Enter the Reply Code from the table below. (e.g., ELCDDA*)

REPLY (AN58) CODE

APP Key	MRC	Mode Code	Requirements
-		A	ADDITIONAL DESCRIPTIVE DATA ON MANUAL
			RECORD

SECTION III

APP Key	MRC	Mode Code	Requirements	
ALL				

AFJF D SPECIFIC USE

Definition: THE REQUIRED PURPOSE OR APPLICATION FOR WHICH THE ITEM IS DESIGNED.

Reply Instructions: Enter the applicable Reply Code from <u>Appendix A</u>, Table 2. (e.g., AFJFDHT*; AFJFDHT\$DJH*; AFJFDHT\$DJH*)

ALL

AKHS D IMAGE TONE

Definition: THE DEGREE OF IMAGE WARMTH DESIGNED TO APPEAR ON THE FINISHED PRINT.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., AKHSDAB*; AKHSDAB\$DAC*)

REPLY CODE AB COLD WARM

ALL

BBRJ D SPECIAL HANDLING FEATURE

Definition: THAT UNUSUAL OR UNIQUE CHARACTERISTIC(S) OR QUALITY(IES) OF AN ITEM WHICH NECESSITATES THE ESTABLISHMENT OF A REQUIREMENT FOR SPECIAL HANDLING.

APP

Key MRC Mode Code Requirements

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., BBRJDAD*; BBRJDAB\$\$DAD*; BBRJDAG\$DAN*)

REPLY	REPLY (AM83)
CODE	
AB	CORROSIVE
AD	FLAMMABLE
AJ	HAZARDOUS FOR AIR TRANSPORTATION,
	REGULATED BY DSAM 4145.3 OR ATARAT-
	TARIFF-6D
AG	POISONOUS
AN	TOXIC

ALL

BGTB H STORAGE FACILITY

Definition: THE STORAGE FACILITY STANDARDS ESTABLISHED TO ASSURE THE SERVICEABILITY OF SUPPLIES IN STORAGE.

Reply Instructions: Enter the applicable Reply Codes from Tables 1, 2, and 3 below. (e.g., BGTBHBASAB*; BGTBHBASAC\$\$HBASAH*; BGTBHBASAB\$HBASAH*)

If a reply is given for mandatory, replies for preferred and alternate cannot be utilized.

If a reply is given for preferred, a reply for alternate must be given. Likewise, if a reply is given for alternate, a reply for preferred must be given. Use and AND/OR coding(\$\$/\$), entering the reply for preferred first. (e.g.,

Table 1	
REPLY CODE	REPLY (AN11)
D	ALTERNATE
В	MANDATORY
C	PREFERRED

Table 2	
REPLY CODE	REPLY (AM81)
AB	ABOVE GROUND MAGAZINE
AT	DOCK LEVEL HEATED WAREHOUSE
AX	DOCK LEVEL UNHEATED WAREHOUSE
AS	GROUND LEVEL HEATED WAREHOUSE
AW	GROUND LEVEL UNHEATED WAREHOUSE
AF	IGLOO MAGAZINE
AG	IMPROVED OPEN
AR	SHED

APP

Key MRC Mode Code Requirements

Table 3

REPLY CODE REPLY (AN12)

AF CHILL

AC CONTROLLED HUMIDITY

AD FLAMMABLE

AG FREEZE

AB GENERAL PURPOSE
AH HEAVY DUTY
AE SECURITY

ALL

AFJQ J STORAGE TEMP RANGE

Definition: THE MINIMUM AND MAXIMUM TEMPERATURES AT WHICH AN ITEM CAN BE STORED WITHOUT DETRIMENTAL EFFECT.

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the minimum and maximum values. (e.g., AFJQJFP32.0/P90.0*; AFJQJCP0.0/P32.0*)

REPLY CODE REPLY (AB36)

C DEG CELSIUS (Centigrade) F DEG FAHRENHEIT

ALL

MARK G SPECIAL MARKINGS

Definition: MARKINGS INCLUDED ON AN ITEM FOR THE PURPOSE OF OFFERING INSTRUCTIONS OR WARNINGS OR TO INDICATE THE PURPOSE, FUNCTION, OR APPLICATION OF THE ITEM. EXCLUDES MANUFACTURERS PART NUMBERS, SYMBOLS, OR THE LIKE.

Reply Instructions: Enter the reply in clear text. (e.g., MARKGDO NOT DROP*)

ALL

CBME J CUBIC MEASURE

Definition: A MEASUREMENT OF VOLUME TAKEN BY MULTIPLYING THE LENGTH BY THE WIDTH BY THE HEIGHT OF AN ITEM AND RENDERED IN CUBIC UNITS.

APP

Key MRC Mode Code Requirements

Reply Instructions: Enter the applicable Reply Code from the table below, followed by the numeric value. (e.g., CBMEJCF27.000*; CBMEJCC5.0*)

REPLY CODE	REPLY (AN76)
KELLI CODE	KELLI (AN/O)

CC CUBIC CENTIMETERS

CF CUBIC FEET
CN CUBIC INCHES
CM CUBIC METERS

ALL

SUPP G SUPPLEMENTARY FEATURES

Definition: CHARACTERISTICS OR QUALITIES OF AN ITEM, NOT COVERED IN ANY OTHER REQUIREMENT, WHICH ARE CONSIDERED ESSENTIAL INFORMATION FOR ONE OR MORE FUNCTIONS EXCLUDING NSN ASSIGNMENT.

Reply Instructions: Enter the reply in clear text. (e.g., SUPPGMAY INCL HOLE IN UPPER SUPPORT FOR MTG DURING SHIPMENT*)

ALL

ZZZP J PURCHASE DESCRIPTION IDENTIFICATION.

Definition: THE CONTROLLING ACTIVITY AND IDENTIFICATION OF A DOCUMENT USED IN LIEU OF A SPECIFICATION IN THE PROCUREMENT OF AN ITEM OF SUPPLY.

Reply Instructions: Enter the 5-position Commercial and Government Entity (CAGE) Code, followed by a dash and the identifying number of the document.

(e.g., ZZZPJ81337-30642A*)

ALL

ZZZV G FSC APPLICATION DATA

Definition: THE JUSTIFICATION FOR THE ASSIGNMENT OF A FEDERAL SUPPLY CLASS (FSC) TO AN ITEM BASED ON THE CLASSIFICATION OF THE NEXT HIGHER CLASSIFIABLE ASSEMBLY.

Reply Instructions: Enter the name of the next higher classifiable assembly in clear text. (e.g., ZZZVGFUEL SYSTEM, GASOLINE ENGINE, NONAIRCRAFT*)

APP Key	MRC	Mode Code	Requirements
ALL			
	CXCY	G	PART NAME ASSIGNED BY CONTROLLING AGENCY

Definition: THE NAME ASSIGNED TO THE ITEM BY THE GOVERNMENT AGENCY OR COMMERCIAL ORGANIZATION CONTROLLING THE DESIGN OF THE ITEM.

Reply Instructions: Enter the reply in clear text. (e.g., CXCYGLINE PROCESSOR CONTROL BOARD*)

ALL

DERM D LEVEL OF DERMAL IRRITATION POTENTIAL

Definition: AN INDICATION OF THE LEVEL OF POTENTIAL FOR ADVERSE SKIN REACTIONS FROM DERMAL EXPOSURE TO A PRODUCT.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., DERMDAB*)

<u>REPLY</u>	REPLY (DE01)
<u>CODE</u>	
AA	EXEMPT, LESS THAN 5 PERCENT CHEMICAL
	COMPONENT BY WEIGHT
AB	MODERATE
AC	NEGLIGIBLE
AD	SLIGHT
ΑE	STRONG

ALL

HZRD D HAZARDOUS SUBSTANCES

Definition: THE SUBSTANCES AND/OR MATERIALS CONTAINED IN THE ITEM THAT HAVE BEEN IDENTIFIED AS HAZARDOUS OR ENVIRONMENTALLY DAMAGING BY THE ENVIRONMENTAL PROTECTION AGENCY OR OTHER AUTHORIZED GOVERNMENT AGENCY.

Reply Instructions: Enter the applicable Reply Code from the table below. (e.g., HZRDDHAZ014*; HZRDDHAZ014\$\$DHAZ020*)

REPLY CODE REPLY (HZ00)

APP Key	MRC	Mode Code	Requirements	
		HAZ014	CORROSIVE LIQUID	
		HAZ015	CORROSIVE SOLID	
		HAZ020	FLAMMABLE	

Reply Tables

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Table 3 - COLORS	

Table 1 - NONDEFINITIVE SPEC/STD DATA NONDEFINITIVE SPEC/STD DATA

REPLY CODE	REPLY (AD08)
AL	ALLOY
AN	ANNEX
AP	APPENDIX
AC	APPLICABILITY CLASS
AR	ARRANGEMENT
AS	ASSEMBLY
AB	ASSORTMENT
BX	BOX
CY	CAPACITY
CA	CASE
CT	CATEGORY
CL	CLASS
CE	CODE
CR	COLOR
CC	COMBINATION CODE
CN	COMPONENT
CP	COMPOSITION
CM	COMPOUND
CD	CONDITION
CS	CONSTRUCTION
DE	DESIGN
DG	DESIGNATOR
DW	DRAWING NUMBER
EG	EDGE
EN	END
FY	FAMILY
FG	FIGURE
FN	FINISH
FM	FORM
FA	FORMULA
GR	GRADE
GP	GROUP
BA	IMAGE COLOR

REPLY CODE	
NS	INSERT
TM	ITEM
KD	KIND
KT	KIT
LG	LENGTH
LT	LIMIT
MK	MARK
AA	MARKER
ML	MATERIAL
BB	MAXIMUM DENSITY
MH	MESH
ME	METHOD
BC	MINIMUM DENSITY
MD	MODEL
MT	MOUNTING
NR	NUMBER
PT	PART
PN	PATTERN
PC	PHYSICAL CONDITION
PS	PIECE
PL	PLAN
PR	POINT
QA	QUALITY
RN	RANGE
RT	RATING
RF	REFERENCE NUMBER
SC	SCHEDULE
SB	SECTION
SL	SELECTION
SE SE	SERIES
SV SV	SERVICE
SX SX	SERVICE
SA SA	1.5
· -	SHADE SHAPE
SH	
SG	SHEET
SZ	SIZE
PZ	SPECIES SPECIES A THON SHEET
SQ	SPECIFICATION SHEET
SD	SPEED
ST	STYLE
SS	SUBCLASS
SF	SUBFORM
SP	SUBTYPE
SN	SURFACE CONDITION
SY	SYMBOL
SM	SYSTEM
TB	TABLE
TN	TANNAGE

REPLY CODE	REPLY (AD08)
TP	TEMPER
TX	TEXTURE
TK	THICKNESS
TT	TREATMENT
TR	TRIM
TY	TYPE
YN	UNIT
VA	VARIETY
WT	WEIGHT
WD	WIDTH

Table 2 - SPECIFIC USES

SPECIFIC USES

<u>REPLY</u> CODE	REPLY (AD34)
JK	BIMAT TRANSFER
JF	COLOR NEGATIVE
JG	COLOR PRINT
DH	COLOR SEPARATION
HT	COMMERCIAL
HX	DIRECT WRITING OSCILLOGRAPH
HW	LITHOGRAPH
HY	MICROFILM
HZ	MOTION PICTURE POSITIVE
JA	NEGATIVE TO POSITIVE COPYING
JC	PHOTOCOPYING
JB	PHOTOMECHANICAL (includes Engineering Reproduction, Graphic Arts, Screen, etc.)
JD	PHOTORECORDING
JH	PORTRAIT
JE	POSITIVE TO POSITIVE COPYING

Table 3 - COLORS

COLORS

REPLY CODE	REPLY (AD06)
A	ANY ACCEPTABLE
BL0000	BLACK
BU0000	BLUE
BR0000	BROWN
CL0000	CLEAR
GL0000	GOLD
GY0000	GRAY
GR0000	GREEN
RE0000	RED

REPLY CODE REPLY (AD06)

MS0059 SEPIA WH0000 WHITE YE0000 YELLOW

Reference Drawing Groups

No table of contents entries found.

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OUNCE TO DECIMAL OF A POUND CONVERSION CHART

<u>OUNCES</u>	<u>POUNDS</u>
1	0.062
2	0.125
3	0.188
4	0.250
5	0.312
6	0.375
7	0.438
8	0.500
9	0.562
10	0.625
11	0.688
12	0.750
13	0.812
14	0.875
15	0.938
16	1.000

OUNCES TO DECIMAL OF A GALLON CONVERSION CHART

<u>OUNCES</u>	GALLONS
1	0.008
2	0.016
3	0.023
4	0.031
5	0.039
6	0.047
7	0.055
8	0.063
9	0.070
10	0.078
11	0.086
12	0.094
13	0.102
14	0.109
15	0.117
16 (pt)	0.125
17	0.133
18	0.141
19	0.148

20 0.156 21 0.164 22 0.172 23 0.180 24 0.188 25 0.195 26 0.203 27 0.211 28 0.219 29 0.227 30 0.234 31 0.242 32 (qt) 0.250 33 0.258 34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422	<u>OUNCES</u>	GALLONS
22 0.172 23 0.180 24 0.188 25 0.195 26 0.203 27 0.211 28 0.219 29 0.227 30 0.234 31 0.242 32 (qt) 0.250 33 0.258 34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438	20	0.156
23	21	0.164
24 0.188 25 0.195 26 0.203 27 0.211 28 0.219 29 0.227 30 0.234 31 0.242 32 (qt) 0.250 33 0.258 34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453	22	0.172
25	23	0.180
26 0.203 27 0.211 28 0.219 29 0.227 30 0.234 31 0.242 32 (qt) 0.250 33 0.258 34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469	24	0.188
27 0.211 28 0.219 29 0.227 30 0.234 31 0.242 32 (qt) 0.250 33 0.258 34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477	25	0.195
28	26	0.203
29	27	0.211
30	28	0.219
31 0.242 32 (qt) 0.250 33 0.258 34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	29	0.227
32 (qt) 0.250 33 0.258 34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	30	0.234
33 0.258 34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	31	0.242
34 0.266 35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	32 (qt)	0.250
35 0.273 36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	33	0.258
36 0.281 37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	34	0.266
37 0.289 38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	35	0.273
38 0.297 39 0.305 40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	36	0.281
39	37	0.289
40 0.313 41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	38	0.297
41 0.320 42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	39	0.305
42 0.328 43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	40	0.313
43 0.336 44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	41	0.320
44 0.344 45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	42	0.328
45 0.352 46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	43	0.336
46 0.359 47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	44	0.344
47 0.367 48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	45	0.352
48 0.375 49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	46	0.359
49 0.383 50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	47	
50 0.391 51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	48	
51 0.398 52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	49	0.383
52 0.406 53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	50	0.391
53 0.414 54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	51	0.398
54 0.422 55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484		0.406
55 0.430 56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484	53	0.414
56 0.438 57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484		
57 0.445 58 0.453 59 0.461 60 0.469 61 0.477 62 0.484		0.430
58 0.453 59 0.461 60 0.469 61 0.477 62 0.484		
59 0.461 60 0.469 61 0.477 62 0.484		
60 0.469 61 0.477 62 0.484		
61 0.477 62 0.484		
62 0.484		
63 0.492		
	63	0.492

<u>OUNCES</u>	GALLONS					
64	0.500					
65	0.508					
66	0.516					
67	0.523					
68	0.531					
69	0.539					
70	0.547					
71	0.555					
72	0.563					
73	0.570					
74	0.578					
75	0.586					
76	0.594					
77	0.602					
78	0.609					
79	0.617					
80	0.625					
81	0.633					
82	0.641					
83	0.648					
84	0.656					
85	0.664					
86	0.672					
87	0.680					
88	0.688					
89	0.695					
90	0.703					
91	0.711					
92	0.719					
93	0.727					
94	0.734					
95	0.742					
96	0.750					
97	0.758					
98	0.766					
99	0.773					
100	0.781					
101	0.789					
102	0.797					
103	0.805					
104	0.813					
105	0.820					
106	0.828					
107	0.836					

<u>OUNCES</u>	<u>GALLONS</u>					
108	0.844					
109	0.852					
110	0.859					
111	0.867					
112	0.875					
113	0.883					
114	0.891					
115	0.898					
116	0.906					
117	0.914					
118	0.922					
119	0.930					
120	0.938					
121	0.945					
122	0.953					
123	0.961					
124	0.969					
125	0.977					
126	0.984					
127	0.992					
128 (gal)	1.000					

STANDARD FRACTION TO DECIMAL CONVERSION CHART

4ths	8ths	<u>16ths</u>	32nds	64ths	<u>To 3</u>	<u>To 4</u>	4ths	8ths	<u>16ths</u>	32nds	64ths	<u>To 3</u>	<u>To 4</u>
				1/64	.016	.0156					33/64	.516	.5156
			1/32		.031	.0312				17/32		.531	.5312
				3/64	.047	.0469					35/64	.547	.5469
		1/16			.062	.0625			9/16			.562	.5625
				5/64	.078	.0781					37/64	.578	.5781
			3/32		.094	.0938				19/32		.594	.5938
				7/64	.109	.1094					39/64	.609	.6094
	1/8				.125	.1250		5/8				.625	.6250
				9/64	.141	.1406					41/64	.641	.6406
			5/32		.156	.1562				21/32		.656	.6562
				11/64	.172	.1719					43/64	.672	.6719
		3/16			.188	.1875			11/16			.688	.6875
				13/64	.203	.2031					45/64	.703	.7031
			7/32		.219	.2188				23/32		.719	.7188
			1132	15/64	.234	.2344				23/32	47/64	.734	.7344
1/4					.250	.2500	3/4					.750	.7500
				17/64	.266	.2656					49/64	.766	.7656
			9/32		.281	.2812				25/32		.781	.7812
				19/64	.297	.2969					51/64	.797	.7969
		5/16			.312	.3125			13/16			.812	.8125
				21/64	.328	.3281					53/64	.828	.8281
			11/32		.344	.3438				27/32		.844	.8438
				23/64	.359	.3594					55/64	.859	.8594
	3/8				.375	.3750		7/8				.875	.8750
				25/64	.391	.3906					57/64	.891	.8906
			13/32	23/04	.406	.4062				29/32		.906	.9062
			13/32	27/64	.422	.4219				29/32	59/64	.922	.9219
		7/16		27/04	.422	.4375			15/16			.938	.9375
		//10			.+30	.+J/J			13/10			.936	.9313
				29/64	.453	.4531					61/64	.953	.9531
			15/32		.469	.4688				31/32		.969	.9688
				31/64	.484	.4844					63/64	.984	.9844
					.500	.5000						1.000	1.0000

FIIG Change List

FIIG Change List, Effective December 4, 2009

Remove SAC Coding from MRC BGTB.